Remarks

The Official Action dated August 28, 2006 has been carefully considered. It is believed that this Amendment, taken with the accompanying remarks, clarifies an apparent misperception of the Examiner, and establishes the patentability of the claims, placing the present application in condition for allowance. Reconsideration and an early allowance are therefore respectfully requested.

By present Amendment, independent claim 30 has been amended to clarify that the recited limitation of the perfume existing in the composition as an emulsion is an actual composition ingredient limitation and not a product-by-process limitation as the Examiner suggests. Specifically, independent claim 30 was amended to remove language that might be misconstrued as process language, and to emphasize that the inventive composition defined by claim 30 comprises, inter alia, perfume existing as an emulsion. As the change does not involve the addition of new matter, entry is believed to be in order and is therefore respectfully requested.

Claims 3, 4, 6-18 and 30-33 remain pending in the present application and claims 3, 4, 11, 15-18 and 31-33 are currently subject to examination.

35 U.S.C. § 103(a)

Claims 3-5, 11, 15-18 and 30-33 are finally rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,714,137 to Trinh et al. (Trinh), in view of U.S. Patent No. 5,676,163 to Behan et al. (Behan), and U.S. Patent 5,861,371 to Wilsch-Irrgang et al. (W-I). As a preliminary matter, Applicants note that despite the rejection language, according to the

Examiner, this is a single reference obviousness rejection, and the Examiner is asserting the "secondary references" solely for purposes of definition and chemical classification.

Specifically, the Examiner asserts that Trinh discloses aqueous, odor absorbing compositions for use on inanimate surfaces, the compositions comprising about 0.1% to about 5% by weight of solubilized, uncomplexed cyclodextrin (CD) and essentially free of any material which would stain or soil fabric, with a pH greater than about 3. The Examiner further asserts that "suitable" CD are disclosed, and that Trinh teaches that the CD "cavities should remain uncomplexed," stating that "this can be accomplished through the use of aqueous solvents and appropriate choice of perfume materials." The Examiner asserts that perfume is present up to about 0.5% and that Trinh teaches a preferred embodiment wherein at least about 75% of the perfume ingredients should have a Clog P of about 3 or smaller, and that most preferably at least about 75% of the perfume materials should come from the table beginning at the middle of col. 12, and notes that P.T. bucinal, cymal and hexyl cinnamic aldehyde are among these materials. The Examiner teaches that "materials with a Clog P of this magnitude are relatively hydrophobic, having a thousand-fold preference for octanol over water." It is known in the art that the cavities of CD are hydrophobic and that CD forms inclusion complexes with molecules which bind in some manner to the hydrophobic cavity. The Examiner asserts that the reference differs from the claimed subject matter because it "does not specifically disclose use of a class I or II aldehyde in the recited amounts, or of an odor blocker in the recited amounts. This rejection is traversed and reconsideration is respectfully requested.

Instant independent claim 30 (from which the other rejected claims depend) is directed to an odor-absorbing or neutralizing concentrated composition useable as an additive in one or more steps of a laundry process. The composition comprises: solubilized, uncomplexed

cyclodextrin; from about 0.0005 to about 1 weight percent of an effective amount of odor blocker; from about 0.01 to about 1 weight percent of an effective amount of class I and/or class II aldehyde; and a perfume comprised of perfume ingredients having a ClogP of more than about 3.5, said composition containing at least enough of said cyclodextrin to provide significant reduction in malodor that survives a typical laundry wash and having a pH of more than about 3, wherein said perfume is hydrophobic and said hydrophobic perfume exists as an emulsion having particles of at least 0.01 microns in diameter and comprising a surfactant material selected from the group consisting of: cyclodextrin compatible surfactants; polymers containing both hydrophobic and hydrophilic portions; and/or cationic fabric softening actives that form stable vesicles in the desired particle size range, said composition being suitable for use as an additive in pretreating, washing, and/or rinsing of fabrics, further wherein said composition is packaged in association with instructions to use it in an effective amount in at least one step in a laundry process to counteract malodors that remain after said laundry process.

The Examiner fails to note that Trinh also differs from the present claims in that Trinh does not disclose a composition comprising, inter alia, emulsions of the hydrophobic perfume ingredient and specifically recited surfactants, wherein the emulsion exists as particle of a particularly recited dimension, as required in the compositions defined by instant independent claim 30. The Examiner appears confused in suggesting that the present composition limitation is a product-by-process limitation, because in this instance the instant composition and the Trinh composition are distinguishable from one another with respect to the composition itself, not just according to the process of formulation, and this distinction is nontrivial in that it parlays into a true functional distinction.

The present inventive composition comprises hydrophobic perfume molecules and CD, wherein the hydrophobic perfume molecule does not form inclusion complexes with the CD because it is emulsified. That is, the hydrophobic perfume which would ordinarily bind to the interior cavity of the CD is not exposed in solution and therefore cannot access the CD cavity. The Trinh compositions, on the other hand, comprise hydrophobic perfumes in either free form, or already bound to CD, and the amount of uncomplexed CD is controlled by manipulating the size and relative hydrophobicity of the perfume molecules. There is no teaching or suggestion in Trinh of impeding access to the CD cavity by formulating the perfume molecules into emulsions and adding the emulsion ingredient to the compositions. To the extent a particular process is implicated, Applicants note only that in order for the perfume molecules to form and exist as emulsions, the emulsifying step would need to be carried out prior to addition of the CD to the composition. Since Trinh fails to teach or suggest this process, and teaches ordinary formulations in the absence of any phase-separation of the perfume and CD, the Trinh compositions, despite hypothetically containing small amounts of hydrophobic perfumes and certain surfactants, would not contain the distinct phase forms as required by instant independent claim 30, and which enable the CD to remain uncomplexed in a solution comprising hydrophobic perfume molecules of any size.

Applicants strongly disagree with the Examiner's assessment that the emulsion limitation is a product-by-process limitation. Indeed, the present compositions comprise a particulate stable and identifiable emulsion. While the emulsion may result from particular process steps, the recitation of those process steps is not necessary to defining either the emulsion or the difference between the presently inventive and Trinh compositions. A formulation chemist of ordinary skill in the art would recognize that in order to effectively form the perfume molecules

into emulsions, one must prevent them from forming inclusion complexes with the CD prior to emulsification.

As previously noted, the presently inventive compositions comprise both uncomplexed cyclodextrin and perfume ingredients that are either hydrophobic or hydrophilic and which may have a relatively high ClogP. In order to achieve this without typing up the cyclodextrin molecules which need to be available to absorb the odor causing organic molecules from the surface to be treated, the perfume ingredient of the present compositions is added in the form of an emulsion/dispersion (see, e.g. instant specification, page 22, lines 21-29, page 23, lines 11-13). As noted in the specification, formation of the perfume ingredient into these emulsions and dispersions prior to the addition of the CD ingredient is what provides the compatibility of the CD with the perfume ingredient, and represents a novel solution to the inherent incompatibility of these ingredients that typically limits their co-inclusion in compositions wherein the CD cavity must remain uncomplexed in order to function as intended.

The presently inventive compositions require the CD to be uncomplexed in the composition, despite the presence of very hydrophobic perfume ingredients. As disclosed in Trinh, the conventional formulaic manipulation to solving the problem associated with providing solutions that use CD to capture odor molecules and perfume ingredients to mask odors or provide subjective freshening to consumers, is to employ predominantly perfumes that do not readily occupy the CD cavity because they are hydrophilic relative to that cavity, and/or to employ perfumes that may occupy the cavity but so weakly that they are readily displaced, and/or that are too large to fit in the cavity, or some combination of these. This is the motivation in Trinh of preferring perfume molecules of a certain ClogP, which, as the Examiner noted, is a measure of relative hydrophobicity. Applicants admit that Trinh allows for the presence of the

entire spectrum of perfume ingredients, and are not asserting the ClogP limitation as patentably distinguishing over Trinh.

As the Examiner notes, Trinh, utilizes open ended language and does not necessarily prohibit perfume ingredients having a ClogP greater than about 3. Obviously, Trinh teaches and permits inclusion, for example, of hydrophobic perfume molecules that are too large to fit in the CD cavity, or are otherwise sterically hindered from doing so, regardless of their Clog P. Applicants submit, however, that there is no teaching or suggesting in Trinh to include hydrophobic perfume molecules as emulsions in order to prevent or impede binding to the CD cavity.

The present inventors, on the other hand, seek to achieve the formulaic goal of having uncomplexed CD and hydrophobic perfume molecules of any size in the same composition by including the perfume ingredient as emulsions/dispersions. The addition of the perfume ingredient as an emulsification is patentably distinct from Trinh, in part because it enables inclusion of a wider range of perfume ingredients while maximizing the availability of uncomplexed CD.

Keeping the perfume ingredient suspended in a stable phase separate from the aqueous phase of the CD also confers a distinguishing effect with respect to the present inventive compositions and their intended functioning. The focus of the malodor control of the present invention is odor that lingers beyond the laundering step, that is, those odors that survive "washing" (e.g. column 1, paragraph 3). In this context, there is a need for compositions which provide longer-lasting odor control capability, a need which would be benefited by inclusion of at least partially hydrophobic perfumes in the composition. The Trinh compositions, on the other hand, are formulated for immediate control of odor and Trinh is therefore unconcerned with how

to maintain hydrophobic perfumes in the composition, as hydrophilic perfumes are suitably and easily employed. Even when Trinh discloses embodiments suitable to confer "more intense" perfume effects, Trinh merely cautions against providing perfume ingredients in too high a ratio to the CD, such that an ineffective level of uncomplexed CD results (column 11, lines 45-65).

To establish prima facie obviousness of the claimed invention, all the claim limitations must be taught or suggested by the prior art, *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Trinh fails to disclose compositions comprising both uncomplexed cyclodextrin and comprising perfume ingredients having ClogP more than about 3.5 that exist in the composition as an emulsiont, wherein the emulsion is particulate with a particle size of at least 0.01 micron in diameter. Trinh, rather, teaches freeing the CD cavity by using ratios of ingredients and size/hydrophobicity attributes of the perfume ingredient. The asserted secondary references, as the Examiner notes, are not relevant to this issue. Hence, instant independent claim 30 is nonobvious and patently distinguishable over Trinh, in view of Behan and W-I.

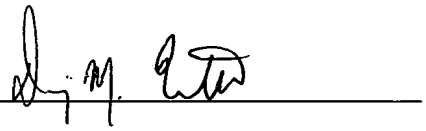
Furthermore, in order to render a claimed invention obvious, the prior art must enable one skilled in the art to make and use the claimed invention, *Motorola, Inc. v. Interdigital Tech. Corp.*, 43 U.S.P.Q.2d 1481, 1489 (Fed. Cir. 1997). Trinh, absent any teaching of tying up hydrophobic perfume molecules as emulsions so that they may not access the CD cavity, fails to enable one of ordinary skill in the art to make a composition suitable for to counteract malodors that remain after said laundry process. As presently disclosed, such a composition function requires, inter alia, that some amount of perfume survive the wash cycle, which is made possible by employment of hydrophobic perfumes of varying sizes. Trinh fails to teach compositions

comprising hydrophobic perfumes in amounts great enough to survive the wash cycle and be effective at treating the targeted malodor.

Dependent claims are nonobvious under §103 if the independent claims from which they depend are nonobvious. *In re Fine,* 837 F.2d 1071, 5 USPQ 2d 1596 (Fed. Cir. 1988). Hence, the rejection under 35 U.S.C. § 103 of independent claim 30, and claims 3-4, 11, 15-18 and 31-33, dependent therefrom, has been overcome. Reconsideration is respectfully requested.

It is believed that the above clarifies the compositional distinction between the present invention and Trinh, and is a comprehensive response to the rejections under 35 U.S.C. § 103 as asserted in the August 28, 2006 Office Action. Reconsideration and an early allowance are therefore respectfully requested.

Respectfully submitted,



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